

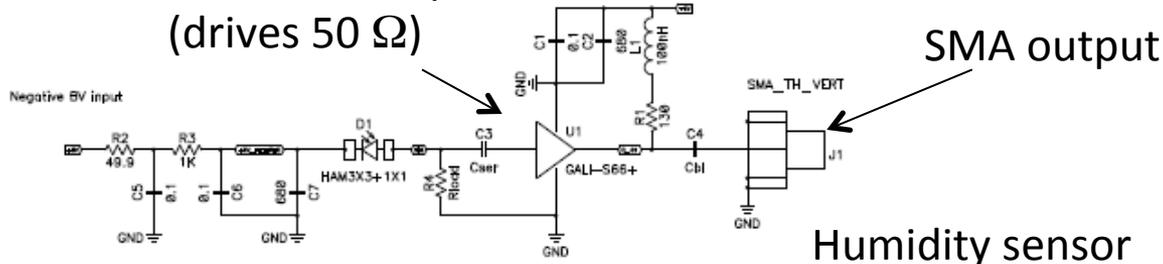
SiPM test pcb

David Christian

4/14/14

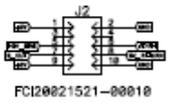
SiPM test pcb (by Sergey Los)

X10 3GHz amp
(drives 50 Ω)



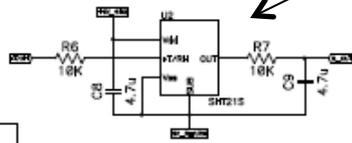
SMA output

Header

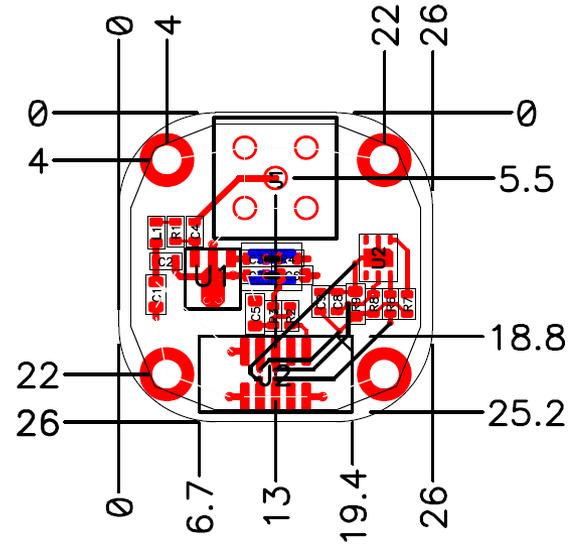
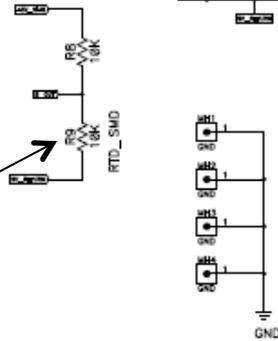


FC120021521-00010
+BV/GND — Max voltage for MPPC
+SV_BIAS and SV_RETURN —
reference voltage and GND
for an RTD or SMT215 sensor,
+T/RH2 — selection between
measuring Temperature and
Relative Humidity,
low — T, high — RH
S_OUT — sensor output voltage

Humidity sensor

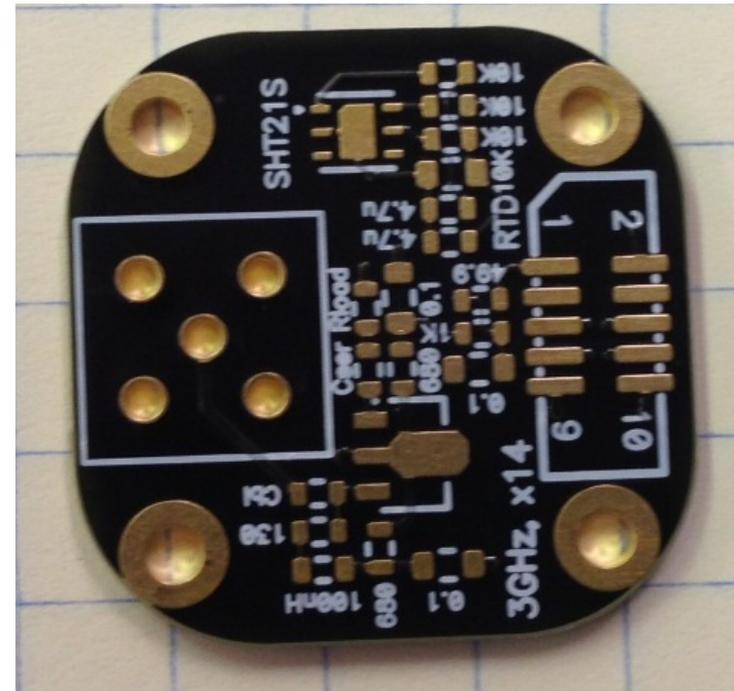
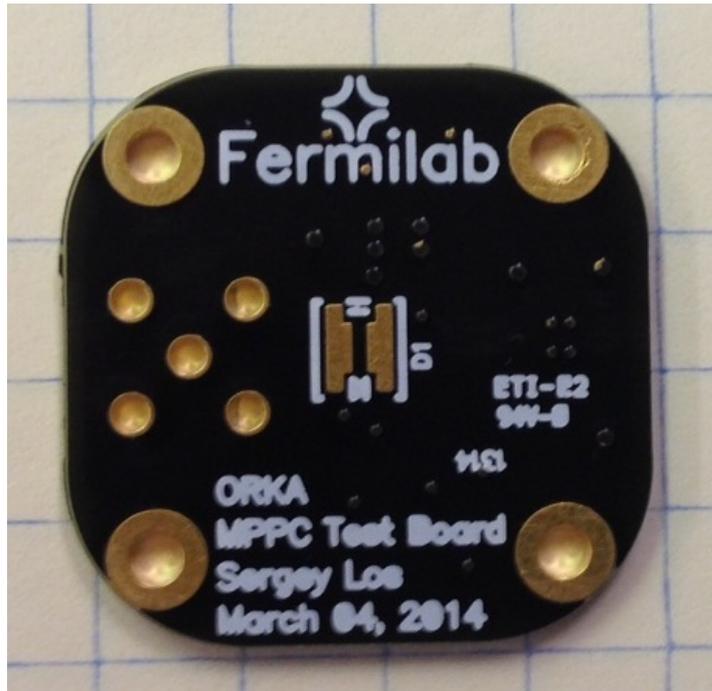


RTD

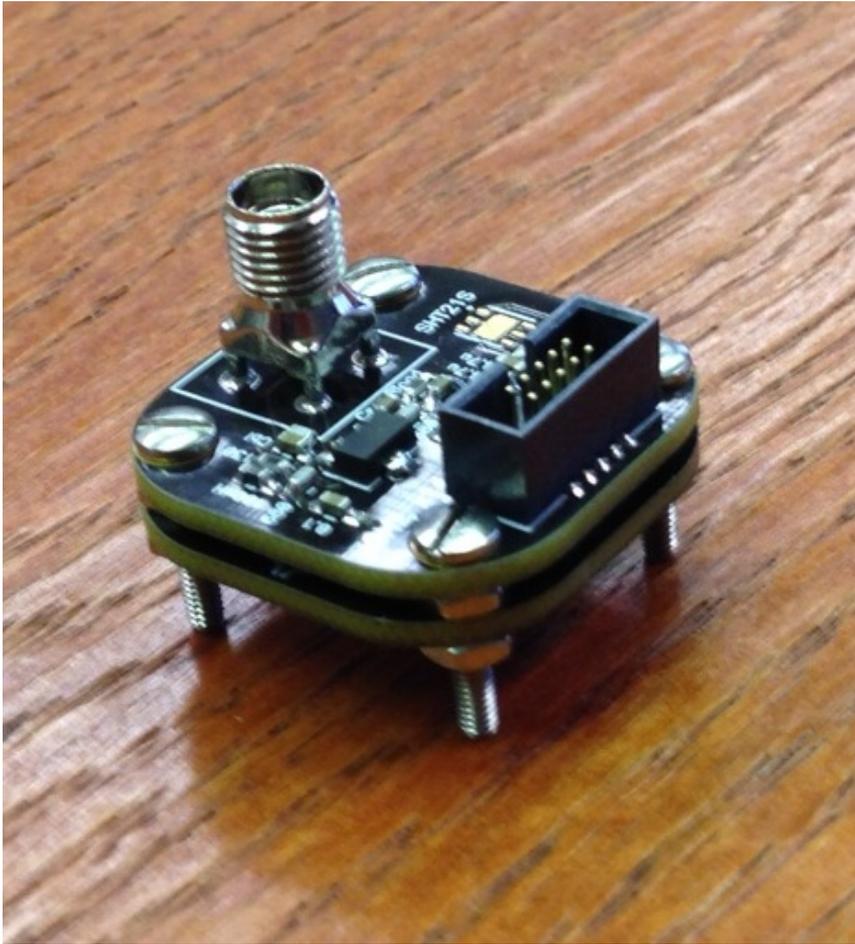


Originalator	S. Los
Drawn	
Checked	
Approved	S. Los
FERMI NATIONAL UNITED STATES	
Title	S10931 Hamat
Size	Drawing Number

SiPM on one side; components on the other



Assembled pcb



Second pcb is used as a clamp in this case (w/hole for light); SiPM mounted w/ anisotropic film.

How many should we assemble?

- 30 pcbs on hand.
- 1 (partially assembled) sent to Elizabeth.
- Will modify a CMS SiPM control board to supply HV & readout temp/humidity.
- Inexpensive USB-I2C interface.
- Plan to provide bare-bones pc slow control/monitoring software.
 - How useful is this step?
 - How many test boards should we assemble?
 - How many control/monitoring setups?